Management of ovarian cysts in postmenopausal women

Care Pathway and Referral Criteria

Purpose and scope
The aim of this guideline is to provide information, based on clinical evidence where available, on the investigation and management of postmenopausal women with known ovarian cysts.

It aims to clarify when ovarian masses can be managed conservatively by GPs in primary care settings, and when referral to secondary care is advisable for suspected malignancy (to the Gynaecology Oncology service at the Cancer Centre, Churchill Hospital) and for benign conditions (to the General Gynaecology service at the Women’s Centre, John Radcliffe Hospital).

Background and introduction
Ovarian cysts are common in postmenopausal women, although the overall prevalence is lower than in premenopausal women. Increasing use of ultrasound and other radiological investigations means that more of these cysts will be seen in primary care.

Ovarian cysts may be discovered as a result of screening, investigations performed for a suspected pelvic mass, or incidentally following investigations carried out for other reasons.

Before ultrasound was routinely available, the finding of a pelvic mass or a palpable ovary in a postmenopausal woman was considered to be an indication for surgery. However, the large numbers of ovarian cysts now being discovered by ultrasound and the low risk of malignancy of many of these cysts suggest that they need not all be managed surgically.

The further investigation and management of these women has implications for morbidity, mortality, resource allocation and tertiary referral patterns and, hence, provides the need for clear guidelines in this area.

The underlying management rationale is to minimise patient morbidity by:

- conservative management where possible;
- use of laparoscopic techniques where appropriate, thus avoiding laparotomy where possible;
- referral to the Gynaecology Oncology service where appropriate.

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| **Input**      | Ms Natalia Price, Consultant Gynaecologist  
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### Ovarian Masses in Postmenopausal Women
#### Primary Care Management Guidelines

#### DIAGNOSIS
- A thorough medical history should be taken, paying specific attention to risk factors for ovarian malignancy (Appendix 1).
- Symptoms suggestive of ovarian malignancy should be considered (Appendix 2).
- A physical examination should include abdominal and vaginal examination.
- A pelvic ultrasound should be performed to evaluate the ovarian mass.
- A serum CA-125 should be measured in all women with an ovarian mass and the Risk of Malignancy Index (RMI) calculated (Appendix 3).

#### PRIMARY CARE MANAGEMENT
- Simple cysts ≤5 cm with a serum CA-125 level <30 IU/ml (and no risk factors for ovarian malignancy) can be managed conservatively in primary care.
- Conservative management entails repeat ultrasound scans and serum CA-125 measurement every 4 months for one year.
- If there is no change in cyst size and appearance, and no rise in CA-125 levels after one year, follow-up can be discontinued.
- If the cyst does not fit the above criteria or if the woman requests surgery, then referral to the Women’s Centre (General Gynaecology service) is advisable to consider laparoscopic surgery.

#### REFER
**REFERRAL to Women’s Centre (General Gynaecological service):**
- Simple cyst ≤5 cm in woman with risk factors for ovarian malignancy (Appendix 1)
- Change in cyst size or rise in CA-125 levels
- Woman’s request to have surgical removal of the cyst (ovaries)

**2 WEEK WAIT REFERRAL to Cancer Centre (Gynaecological Oncology service):**
- Simple cyst >5 cm
- Complex cyst (any size)
- CA-125 >30 IU/ml
- RMI >25

#### ADDITIONAL INFORMATION
Appendix 1

Risk factors for ovarian malignancy

- Personal history of breast cancer
- Family history of breast or ovarian cancer (1st degree relative)
- BRCA1 or BRCA2 gene carrier
- Lynch syndrome, or hereditary nonpolyposis colorectal cancer (HNPCC), is an autosomal dominant genetic predisposition to colon cancer, as well as other malignancies including endometrial and ovarian cancer.

Appendix 2

Symptoms suggestive of ovarian malignancy

- Persistent abdominal distension (women often refer to this as ‘bloating’)
- Feeling full (early satiety) and/or loss of appetite
- Pelvic or abdominal pain
- Increased urinary urgency and/or frequency.

Appendix 3

Calculating the Risk of Malignancy Index (RMI)

*It is recommended that all postmenopausal women with a known ovarian cyst should have the RMI calculated to decide on the most appropriate management*.

\[
RMI = U \times M \times CA-125
\]

*U* = 0 (ultrasound score of 0); *U* = 1 (ultrasound score of 1); *U* = 3 (ultrasound score of 2–5)

Ultrasound scans are scored one point for each of the following characteristics: multilocular cyst; evidence of solid areas; evidence of metastases; presence of ascites; bilateral lesions.

*M* = 3 for all postmenopausal women dealt with by this guideline

*CA-125* is serum CA-125 measurement in IU/ml
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<tr>
<th>RMI &lt;25 = LOW RISK: &lt;3% risk of cancer</th>
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<tr>
<td>Can be managed in primary care</td>
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<td>Simple cysts ≤5 cm with a serum CA-125 level &lt;30 IU/ml (and no risk factors for ovarian malignancy) can be managed conservatively. Conservative management entails repeat ultrasound scans and serum CA-125 measurement every 4 months for one year (in primary care).</td>
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<td>• If no change after one year (three scans &amp; CA-125 measurements) follow-up can be discontinued</td>
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<tr>
<td>• If the cyst does not fit the above criteria or if the woman requests surgery, then referral to the Women’s Centre (General Gynaecology service) is advisable to consider laparoscopic oophorectomy.</td>
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<th>RMI 25-250 = MODERATE RISK: 20% risk of cancer</th>
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<td>Refer to Cancer Centre (Gynaecological Oncology service)</td>
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<td>• Laparoscopic oophorectomy is acceptable in selected cases.</td>
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<td>• Women should be counselled preoperatively that a full staging laparotomy would be required if evidence of malignancy is found.</td>
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<th>RMI &gt;250 = HIGH RISK: &gt;75% risk of cancer</th>
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<td>2 week wait referral to Cancer Centre (Gynaecological Oncology service)</td>
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